

INTERNATIONAL SEARCH REPORT

PCT/US2004/028557

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B29C65/00 B31D3/02 B29C53/56		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 B29C B31D		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 4 631 108 A (COLSON WENDELL B) 23 December 1986 (1986-12-23) column 8, lines 49-66; claims 1,4; figures 1,10,12,13	9 1-8, 10-12
X	US 5 002 628 A (SCHNEBLY JOHN T) 26 March 1991 (1991-03-26) column 5, line 46 - column 11, line 13; claim 1; figure 4 column 12, line 3	1-10,12
X A	US 4 677 012 A (ANDERSON RICHARD N) 30 June 1987 (1987-06-30) column 6, lines 9-11	9 1-8, 10-12
	----- -/-- -----	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the International filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the International filing date but later than the priority date claimed "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the International search 21 December 2004		Date of mailing of the International search report 28/12/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Foulger, C

INTERNATIONAL SEARCH REPORT

PCT/US2004/028557

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 319 586 B1 (COLSON WENDELL B) 20 November 2001 (2001-11-20) column 20, lines 25-29; claim 1; figures 10,11	1-12
A	US 6 024 819 A (COREY JOHN A) 15 February 2000 (2000-02-15) column 8, paragraph 3	1,6

INTERNATIONAL SEARCH REPORT

Information on patent family members

PCT/US2004/028557

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4631108	A	23-12-1986	US 4450027 A	22-05-1984
			AU 570970 B2	31-03-1988
			AU 2849384 A	28-11-1985
			AU 626668 B2	06-08-1992
			AU 603854 B2	29-11-1990
			AU 8318087 A	21-04-1988
			CA 1218922 A1	10-03-1987
			CA 1240246 A2	09-08-1988
			EP 0162160 A2	27-11-1985
			EP 0315223 A1	10-05-1989
			JP 1789610 C	29-09-1993
			JP 4077659 B	09-12-1992
			JP 60245547 A	05-12-1985
			US 4603072 A	29-07-1986
US 5002628	A	26-03-1991	US 4885190 A	05-12-1989
			US 4732630 A	22-03-1988
			AT 69765 T	15-12-1991
			AU 601311 B2	06-09-1990
			AU 2414688 A	02-02-1989
			AU 580526 B2	12-01-1989
			AU 7002087 A	01-10-1987
			CA 1280957 C	05-03-1991
			CA 1301039 C2	19-05-1992
			DE 3774753 D1	09-01-1992
			EP 0243008 A2	28-10-1987
			ES 2026528 T3	01-05-1992
			JP 1791180 C	29-09-1993
			JP 4081939 B	25-12-1992
			JP 63015739 A	22-01-1988
US 4677012	A	30-06-1987	AT 67119 T	15-09-1991
			AU 579084 B2	10-11-1988
			CA 1268695 A1	08-05-1990
			DE 3681407 D1	17-10-1991
			EP 0222534 A2	20-05-1987
			GB 2183278 A , B	03-06-1987
			GR 3003233 T3	17-02-1993
			HK 15490 A	09-03-1990
			JP 1657948 C	21-04-1992
			JP 3018830 B	13-03-1991
			JP 62161534 A	17-07-1987
			NZ 218039 A	27-11-1990
			NZ 226699 A	27-11-1990
US 6319586	B1	20-11-2001	US 5670000 A	23-09-1997
			US 5482750 A	09-01-1996
			AU 648368 B2	21-04-1994
			AU 8986991 A	09-07-1992
			BR 9105651 A	15-09-1992
			CA 2046725 A1	03-07-1992
			EP 0494102 A2	08-07-1992
			JP 2614378 B2	28-05-1997
			JP 4339987 A	26-11-1992
			SG 54117 A1	16-11-1998
			US 5601885 A	11-02-1997
US 6024819	A	15-02-2000	AU 749863 B2	04-07-2002

INTERNATIONAL SEARCH REPORT

Information on patent family members

PCT/US2004/028557

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6024819	A	AU 1069499 A	03-05-1999
		BR 9815242 A	23-07-2002
		CA 2306370 A1	22-04-1999
		EP 1021634 A1	26-07-2000
		JP 2001520338 T	30-10-2001
		WO 9919592 A1	22-04-1999
		US 6171424 B1	09-01-2001
		US 6302982 B1	16-10-2001
		US 2001050131 A1	13-12-2001
		US 2001037849 A1	08-11-2001
		US 2002014296 A1	07-02-2002
